



THE CASE FOR PLACE-BASED

They Remember What They Touch...

**The Impact of Place-Based Learning in
East Feliciana Parish**

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Contrary to its Spanish name, East Feliciana has never been a “happy land” for public education. Located in southeastern Louisiana, East Feliciana Parish School District was carved out as a result of consolidations, closures, mergers and chronic poor school performance. The district serves approximately 3,000 students, 2,400 of them in grades K-8. In a parish where African Americans comprise only 47.1% of the population, they represent more than 80% of the public school students; most, 84.8%, qualify for free or reduced-price lunch.

Stressed by high poverty levels, a low tax base and low teacher salaries, the district competes, most often unsuccessfully, with neighboring districts and states, and with a relatively segregated white academy system for qualified teachers and pupil resources. Consequently, at the dawn of the federal government’s landmark education reform initiative, the No Child Left Behind Act of 2001, 55.8% percent of the district’s K-8 teachers were not fully certified to teach and 80% of its students were performing below average in at least one core subject. (District Indicator Summary Results, 2000-2001) At the same time, only 31.8% of the parish’s adult population had completed high school and fewer than 5% were college graduates. With a median household income of \$26,864, 26% of the parish’s children were living below the poverty level.

Testing and Accountability

Beginning in the spring of 1999, in an effort to improve education overall, Louisiana instituted the Louisiana Educational Assessment Program for the 21st Century (LEAP 21). LEAP 21 tests in English Language Arts and Mathematics were administered to students in grades 4 and 8, and in spring 2000, science and social studies tests were added. The statewide accountability program requires students to develop conceptual understanding in specific content areas and to be able to apply their knowledge in the context of the real world.

Table 1 (page 3) shows LEAP 21 scaled-score ranges for grades 4 and 8 for each of five achievement levels. Ranges are not comparable across grade levels or content areas because of variances in test content and difficulty. No 4th or

8th grade student can be promoted if he or she scores at the unsatisfactory achievement level on the LEAP 21 English Language Arts or Mathematics tests.

School year 1998-99 was the baseline year for school and district accountability. In that year, 27% of East Feliciana’s 4th graders scored at the unsatisfactory level in English Language Arts (compared to 20.7% for the state), and 44% (34.8% for the state) scored unsatisfactory in mathematics. Unless the schools made substantial progress over a short period of time, East Feliciana school district would be subject to “corrective action” and increased external control. It was within this context that Daisy Slan, district superintendent, began to seek out reform strategies to raise student achievement and the district’s persistently low test scores.

Table 1. Louisiana Educational Assessment Program Scaled Score Ranges

Achievement Level*	English Language Arts		Mathematics		Science		Social Studies	
	Scaled-Score Range		Scaled-Score Range		Scaled-Score Range		Scaled-Score Range	
	Grade 4	Grade 8	Grade 4	Grade 8	Grade 4	Grade 8	Grade 4	Grade 8
Advanced	408-500	402-500	419-500	398-500	40-500	400-500	399-500	404-500
Proficient	354-407	356-401	370-418	376-397	360-404	345-399	353-398	350-403
Basic	301-353	315-355	315-369	321-37	306-359	305-344	301-352	297-349
Approaching Basic	263-300	269-314	282-314	296-320	263-305	27-304	272-300	263-296
Unsatisfactory	100-262	100-268	100-281	100-295	100-262	100-266	100-262	100-274

***Advanced:** Student has demonstrated superior performance beyond the proficient level of mastery

Proficient: Student has demonstrated competency over challenging subject matter and is well prepared for the next level of schooling

Basic: Student has demonstrated only the fundamental knowledge and skills needed for the next level of schooling

Approaching Basic: Student has only partially demonstrated the fundamental knowledge and skills needed for the next level of schooling

Unsatisfactory: Student has not demonstrated the fundamental knowledge and skills needed for the next level of schooling

SOURCE: LEAP21/GEE21 2001-2002 Annual Report, online at www.doe.state.la.us/lde

School Reform Through Place-Based Learning

With funding from the National Science Foundation's Delta Rural Systemic Initiative, East Feliciana began a place-based mathematics and science initiative, which it called Project Connect. In 1999, The Rural School and Community Trust (then the Annenberg Rural Challenge) provided additional funding and technical support to enhance and expand the implementation of Project Connect at the 4th grade level.

According to Dr. Knight Roddy, district director for place-based learning, Project Connect initially focused on improving science instruction by connecting the schools and the community in new and important ways. He hoped this strategy would point the way for changes in other subject areas as well. Using the environment as the theme of their place-based learning, students studied local soil, rocks and minerals, ecology, topography, weather, biodiversity, and water quality. Nature trails and butterfly gardens were built. Over time, the focus of place-based work has expanded to include local geography and history as a meaningful context to

teach science, mathematics, social studies and language arts. The work has involved mainly K-8 teachers and students, content area facilitators, principals, and central office personnel. Local community partners come from a wide range of organizations and agencies, including the Watershed Alliance, the Extension Service, and area universities.

Schools and Students Served

East Feliciana began using place-based education in its five elementary and middle schools: Clinton Middle, Jackson Middle, Clinton Elementary, Jackson Elementary and Slaughter Elementary. These five schools serve approximately 2,000 students in grades K-8. Dr. Knight Roddy reports that over the last three years, approximately 1,800 East Feliciana students have participated in place-based learning. Table 2 (page 4) gives a summary of selected indicators for each of the five schools during the 1998-1999 academic year, the year prior to the implementation of place-based learning.

Table 2. Summary Indicators for East Feliciana Elementary and Middle Schools 1998-1999

School	Student Data				Teacher Data ¹		Performance Label
	Number K-8	% Black	% Sp.Ed.	% Poverty	% Cert.	% Masters	
Clinton ES	488	92.49	8.06	89.56	28.6		Academically Below Average
Clinton MS	445	90.23	11.46	88.54	36.0		Academically Below Average
Jackson ES	735	75.20	13.05	78.68	33.3		Academically Below Average
² Jackson MS	~	~	~	~	~		~
Slaughter ES	256	35.02	10.47	61.37	92.3		Academically Below Average

¹From the 1999-2000 school year.

²Jackson Middle School was established in 1999-2000. In that year, it enrolled 279 students, 75.27% of whom were African American; 77.03% were in poverty and 13.78% in special education. Only 50% of the teachers were certified.

Teachers Served

Three consecutive summer training programs were offered to East Feliciana's elementary teachers, focusing on content knowledge and place-based learning. Project Connect I was offered in July 2000, and focused on local natural resources and standards-based science assessment. Project Connect II was held in July 2001 and built on Project Connect I by demonstrating to teachers how mathematics, science, and technology could be integrated in the study of local natural resources. Project Connect III was offered in June 2002, and focused on local geography and history. Over the course of these three programs, 52 different teachers were trained. Ten of them were involved in Project Connect I and II, and received approximately 132 hours of place-based training. The remaining 42 were involved in Project Connect I, II or III, and received up to 72 hours of training.

Following Project Connect I, an interdisciplinary district leadership team composed of science, mathematics and language arts facilitators formed to design and present place-based units and teacher workshops collaboratively. This team received additional training in place-based learning through a site visit to Lubec, Maine, and through participation in the Roger Tory Peterson Institute's "Teaming with Nature Program." They returned to help design and conduct trainings for the teachers in Project Connect II. Teachers who were unable to attend the trainings have embraced

place-based learning as a result of two school-year workshops and subsequent support of the district's science and place-based learning facilitators. The greatest impact of teacher training has been seen at Slaughter Elementary School where three of the leadership team members teach.

In addition to increasing their knowledge and skills in place-based learning, leadership team members have gained valuable workshop planning, instruction and administration skills, not only during the summer programs, but also through meeting and conference presentations. Every administrator, supervisor and school board member was introduced to the concept and local examples of place-based learning. Consequently, the local support structure for place-based learning has gained in depth.

Changes in Student Achievement 1998-2002

LEAP 21 District-wide Results

Table 3 (page 5) shows changes in LEAP 21 test scores for East Feliciana's 4th grade classes from 1998-1999 to 2001-2002. The indicator for students performing at the unsatisfactory level provides a measure of progress. As place-based learning became more interdisciplinary over time, English Language Arts and social studies data are provided along with mathematics and science data.

Table 3. Percent of East Feliciana Students Performing at Unsatisfactory Level on LEAP 21 in 1998-99 through 2001-202								
	1998-99		1999-00		2000-01		2001-02	
Grade 4	District	State	District	State	District	State	District	State
English Language Arts	27.3	20.7	32.6	19.7	25.4	16.4	18.4	14.2
Mathematics	44.0	34.8	39.0	28.3	33.0	23.3	24.9	24.7
Science	N/A	N/A	27.5	18.2	15.3	15.2	19.4	14.5
Social Studies	N/A	N/A	39.4	23.8	34.4	21.1	28.1	20.6

In 1998-99, the baseline year for LEAP 21, 27.3% of the district's 4th grade students performed at the unsatisfactory level in English Language Arts. When the district introduced place-based learning in 1999, the percentage had increased to 32.6%. In the year after place-based learning was introduced, the number of students scoring at the unsatisfactory level in English Language Arts decreased by seven percentage points from year 1999 – 2000 to 25.4%. By 2001-2002, the percentage had decreased to 18.4, a full 13.2 points from 1999-2000. Over the same period, the percentage of students scoring unsatisfactory in the state decreased by only 6.5 points (from 20.7% to 14.2%). The gap between the district and the state narrowed from 12.9 percentage points to 4.2.

Similar gains were seen in mathematics, science and social studies (See Figure 1 and Figure 2). In mathematics, there was a 14.1-point decline for East Feliciana students who performed at the unsatisfactory level, from 39% in 1999-00 to 24.9% in 2001-02 (compared to a 3.6 point decline in the state as a whole). The gap between the district and the state narrowed from 9.3 to 4.9 points.

In science, East Feliciana's 4th graders posted an 8.1-point decrease in the number of students scoring unsatisfactory between 1999-00 and 2001-02 while in the state overall, there was a 3.7-point decrease. In 2000-01, East Feliciana's 4th graders tied the overall state performance in science. In social studies, there was an 11.3-point decrease in the number of students scoring unsatisfactory

Figure 1. Percent of 4th Graders Scoring Unsatisfactory on State Tests 1999-00

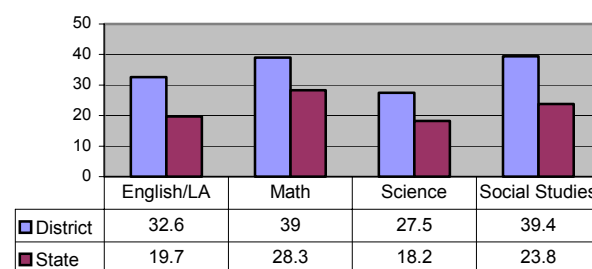
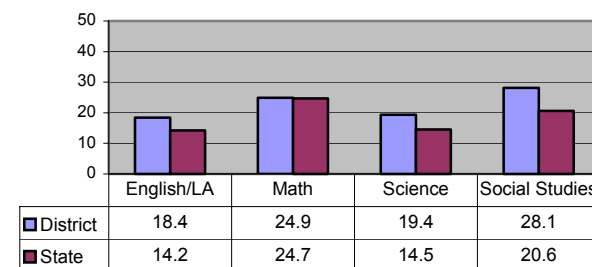


Figure 2. Percent of 4th Graders Scoring Unsatisfactory on State Tests 2001-02



SOURCE: Louisiana Department of Education website, www.state.la.us/lde

compared to a 3.2-point decrease for the state overall.

LEAP 21 Individual School Results

Tables 4 through 6 show year-by-year 4th grade student achievement by school as compared to that of 4th graders throughout the state from 1998-1999 to 2001-2002.

Table 4. Percent of Clinton Elementary and State Fourth Graders Performing at Unsatisfactory Level on LEAP 21 in 1998-99 through 2001-2002								
	1998-99		1999-00		2000-01		2001-02	
Grade 4	School	State	School	State	School	State	School	State
English Language Arts	26.8	20.7	29.0	19.7	28.4	16.4	23.4	14.2
Mathematics	40.2	34.8	39.8	28.3	37.3	23.3	22.5	24.7
Science	N/A	N/A	32.3	18.2	15.7	15.2	18.9	14.5
Social Studies	N/A	N/A	38.7	23.8	35.3	21.1	29.7	20.6

SOURCE: Louisiana Department of Education website, www.state.la.us/ldc

At Clinton Elementary School, the greatest gains were in mathematics and science, the initial focus areas for their place-based learning initiative. In mathematics, the percentage of students scoring unsatisfactory decreased by 17.3 points, from 39.8 in 1999-2000 to 22.5 in 2001-2002. Statewide, the percentage dropped by only 3.6 points. In science, the percentage of Clinton students scoring unsatisfactory decreased by 13.4 points, from 32.3% to 18.9% while the state percentage dropped by only 3.7 points. (See Figure 3 and Figure 4)

From 1999-2000 to 2001-2002, Jackson Elementary showed substantial decreases in the percentages of 4th graders scoring unsatisfactory on the LEAP 21 English Language Arts and social studies tests, but slight increases in mathematics and science. Superintendent Slan attributes this to the school's relative instability. Originally a K-8 school, it was restructured as an elementary school in 1999-2000. Additionally, the school experienced an exceptionally high teacher turnover rate making it virtually impossible to sustain school-wide innovation of any kind. Table 5 (page 7) shows year-by-year LEAP 21 score changes from 1998-1999 to 2001-2002.

Figure 3. Percent Clinton 4th Graders Scoring Unsatisfactory on LEAP 21 Tests 1999-2000

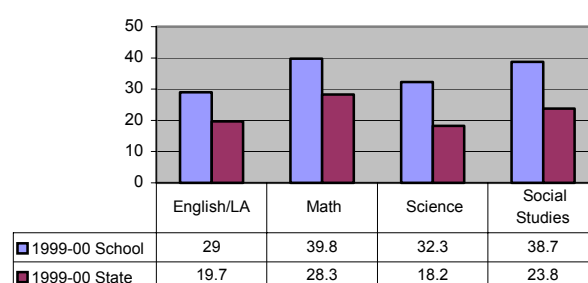
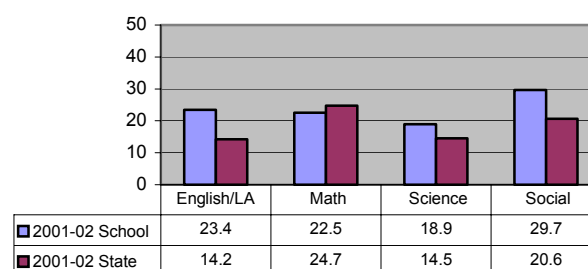


Figure 4. Percent Clinton 4th Graders Scoring Unsatisfactory on LEAP 21 Tests 2001-2002



SOURCE: Louisiana Department of Education website, www.state.la.us/ldc

Table 5. Percent of Jackson Elementary and State Fourth Graders Performing at Unsatisfactory Level on LEAP 21 in 1998-99 through 2001-2002

	1998-99		1999-00		2000-01		2001-02	
Grade 4	School	State	School	State	School	State	School	State
English Language Arts	31.0	20.7	36.7	19.7	30.2	16.4	18.3	14.2
Mathematics	57.7	34.8	36.7	28.3	38.1	23.3	38.0	24.7
Science	N/A	N/A	27.8	18.2	22.2	15.2	28.2	14.5
Social Studies	N/A	N/A	49.4	23.8	49.2	21.1	33.8	20.6

SOURCE: Louisiana Department of Education website, www.state.la.us/lde

The greatest individual school success in East Feliciana is clearly Slaughter Elementary School where three of the place-based leadership team

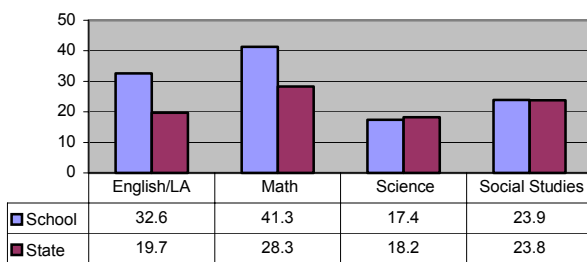
members teach. Table 6 shows year-by-year changes in LEAP 21 scores from 1998-1999 to 2001-2002.

Table 6. Percent of Slaughter Elementary and State Fourth Graders Performing at Unsatisfactory Level on LEAP 21 in 1998-99 through 2001-2002

	1998-99		1999-00		2000-01		2001-02	
Grade 4	School	State	School	State	School	State	School	State
English Language Arts	22.0	20.7	32.6	19.7	11.4	16.4	2.9	14.2
Mathematics	29.3	34.8	41.3	28.3	15.9	23.3	5.7	24.7
Science	N/A	N/A	17.4	18.2	4.5	15.2	2.9	14.5
Social Studies	N/A	N/A	23.9	23.8	11.4	21.1	11.4	20.6

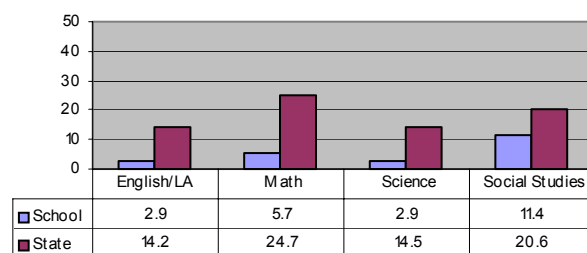
SOURCE for Table 6 and Figures 5 and 6: Louisiana Department of Education website, www.state.la.us/lde

Figure 5. Percent Slaughter 4th Graders Scoring Unsatisfactory on LEAP 21 1999-2000



In 1999-2000, 32.6% of 4th graders scored unsatisfactory on the LEAP 21 tests in English Language Arts. In 2001-2002, that number had decreased to 2.9%, a difference of 29.7 points. Similar results were achieved across subject areas with a 35.6-point drop in the percentage of students failing the mathematics test (from 41.3%

Figure 6. Percent Slaughter 4th Graders Scoring Unsatisfactory on LEAP 21 Tests 2001-2002



to 5.7%, compared to 28.3% and 24.7% for the state as a whole). In science, the percentage of students scoring unsatisfactory went from 17.4% to 2.9% (18.2% to 14.5% in the state), and in social studies from 23.9% to 11.4% (23.8% to 20.6% for the state). (See Figure 5 and Figure 6)

Although test scores for East Feliciana's 4th graders remain behind those of 4th graders in the state as a whole in most instances, they are clearly making great gains, most often at rates far exceeding those of the state. Place-based learning has undoubtedly made a difference.

Place-Based Learning: Beyond the Test Scores

In East Feliciana, place-based learning has had an impact beyond standardized test scores and beyond the walls of the school itself. Parish schools are developing lasting school-community partnerships. The district is connecting its residents, including students, with natural resources located in East Feliciana and the surrounding communities by collaborating with educators, parents, community members, clergy, businesses and nonprofits. Community partnerships have already been formed with the following:

- Cooperative Extension Service
- Local sheriff's office
- Local community historians
- Delta Service Corps
- State Office of Forestry
- Natural Resource Conservation Service
- United States Geological Survey
- Colleges and universities
- Regional Watershed Alliance
- Local preservation and historical associations

According to Dr. Roddy, "Those involved have developed new knowledge and skills, and learned much about the challenges of place-based learning." The acquisition of new knowledge and skills by community members will undoubtedly benefit the community as a whole. At the least, it provides for a more informed citizenry and greater community capacity to support and maintain quality education in the district's public schools.

Dr. Roddy also maintains "place-based learning is serving as a hook to get students excited about learning." He continues, "kids are interested in going outside of the school buildings and learning within the context of their environment." Mr. Hunter, a 7th grade science teacher at Jackson Middle School, made the following comments to Rural Trust steward Julie Bartsch during one of her site visits:

Kids are remembering facts from last year about the critters they netted. When other students and adults come to my class, my students can talk articulately about what they are doing...they remember what they touch!

Sources of Information:

The Rural School and Community Trust
Dr. Knight Roddy, Project Coordinator – East Feliciana School District
Dr. Daisy Slan, Superintendent – East Feliciana School District
Louisiana Department of Education Website